

PRL1 Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8439A

Specification

PRL1 Antibody - Product Information

Application	WB,E
Primary Accession	O93096
Other Accession	NP_003454
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	19815

PRL1 Antibody - Additional Information

Gene ID 7803

Other Names

Protein tyrosine phosphatase type IVA 1, PTP(CAAXI), Protein-tyrosine phosphatase 4a1, Protein-tyrosine phosphatase of regenerating liver 1, PRL-1, PTP4A1, PRL1, PTPCAAX1

Target/Specificity

This PRL1 antibody is generated from rabbits immunized with a recombinant protein encoding full length of human PRL1.

Dilution

WB~~1:1000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

PRL1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

PRL1 Antibody - Protein Information

Name PTP4A1

Synonyms PRL1, PTPCAAX1

Function Protein tyrosine phosphatase which stimulates progression from G1 into S phase during

mitosis. May play a role in the development and maintenance of differentiating epithelial tissues. Enhances cell proliferation, cell motility and invasive activity, and promotes cancer metastasis.

Cellular Location

Cell membrane; Lipid-anchor. Early endosome. Endoplasmic reticulum. Cytoplasm Cytoplasm, cytoskeleton, spindle. Nucleus {ECO:0000250|UniProtKB:Q78EG7}. Note=And mitotic spindle

Tissue Location

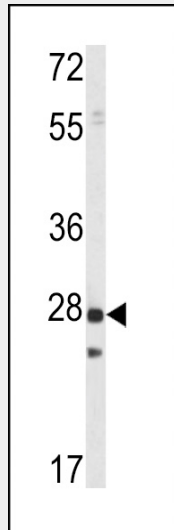
Expressed in bone marrow, lymph nodes, T lymphocytes, spleen, thymus and tonsil. Overexpressed in tumor cell lines.

PRL1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

PRL1 Antibody - Images



Western blot analysis of PRL1 (Cat. #AP8439a) in mouse spleen tissue lysates (35ug/lane). PRL1 Antibody (arrow) was detected using the purified Pab.

PRL1 Antibody - Background

The protein encoded by this gene belongs to a small class of prenylated protein tyrosine phosphatases (PTPs), which contains a PTP domain and a characteristic C-terminal prenylation motif. PTPs are cell signaling molecules that play regulatory roles in a variety of cellular processes. This tyrosine phosphatase is a nuclear protein, but may primarily associate with plasma membrane. The surface membrane association of this protein depends on its C-terminal prenylation. Overexpression of this gene in mammalian cells conferred a transformed phenotype, which

implicated its role in the tumorigenesis. Studies in rat suggested that this gene may be an immediate-early gene in mitogen-stimulated cells. PRL phosphatases increase cell proliferation by stimulating progression from G1 into S phase. PRL-1 function is regulated in a cell cycle-dependent manner and implicate PRL-1 in regulating progression through mitosis, possibly by modulating spindle dynamics.

PRL1 Antibody - References

Jeong,D.G., et al. J. Mol. Biol. 345 (2), 401-413 (2005)
Werner,S.R., et al. Cancer Lett. 202 (2), 201-211 (2003)
Wang,J., et al. J. Biol. Chem. 277 (48), 46659-46668 (2002)
Nicolas,G., et al. Mol. Cell. Biol. 22 (10), 3527-3536 (2002)
Zeng,Q., et al. J. Biol. Chem. 275 (28), 21444-21452 (2000)
Cates,C.A., et al. Cancer Lett. 110 (1-2), 49-55 (1996)